
Subject: Estimation of cutoff points for Rwanda 2014-15 wealth index

Posted by [avmujica](#) on Tue, 25 Apr 2017 15:32:58 GMT

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Hi,

I am trying to replicate the cutoff points for wealth quintiles in the Rwanda 2014-15 survey. I am working with the HR dataset and have almost been able to recreate the distribution of households across quintiles using hv271 (wealth index factor score, 5 decimals) - I am working on Stata:

```
gen hhweight = (hv005*hv012)/1000000
xtile hhwealth = hv271 [pw = hhweight], nq(5)
```

However, when I run the analysis to get the cutoff points, I do not get the same results as those reported in the country spreadsheet (see below). Is this because the combscor is not the same as hv271?

Would really appreciate if someone could help me sort this out. Thanks!

Ana

```
_pctile hv271 [pw=hhweight], nq(5)
return list
```

scalars:

```
r(r1) = -.6646999716758728
r(r2) = -.4281199872493744
r(r3) = -.1414700001478195
r(r4) = .4008800089359283
```

Statistics

combscor Combined national wealth score

Percentiles 20 -.6939782

40 -.4744206

60 -.1973164

80 .3421368

Subject: Re: Estimation of cutoff points for Rwanda 2014-15 wealth index

Posted by [Trevor-DHS](#) on Mon, 08 May 2017 20:26:11 GMT

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Combscor is the same as hv271, but the percentiles from combscor that you show below are actually weighted percentiles for households (total of 12699 households), not for household

members, so are not the actual quintile cutoffs.

Your code for calculating the quintiles produces virtually identical results to those in hv270, apart from four cases:

```
. list hv271 hv270 hhwealth if hv270 != hhwealth
```

```
+-----+
| hv271  hv270  hhwealth |
|-----|
7064. | -66470  poorer    1 |
7743. |  40088  richest    4 |
7973. | -63769  poorer    . |
11711. | -14147  richer    3 |
+-----+
```

I think there are two reasons for the slight differences:

1) There is one case for which you have `hhwealth == .`. This is because there is 1 household with 0 de jure members listed. For the few households that we get with 0 de jure members listed, we use the de facto number of members instead. thus we might have

```
gen ppl=hv012
```

```
replace ppl=hv013 if hv012==0
```

```
gen hhweight = (hv005*ppl)/1000000
```

2) I think there is some rounding going on. The other 3 cases above are all right at the quintile boundaries that you calculated. When we calculate the quintiles we actually have more digits of precision of the scores. We use the SPSS Rank command and I expect that there are slightly different rules about selection of quintiles between the SPSS Rank and the Stata `_pctile` commands, in addition to the precision issue.

So I can't fully explain the differences, but hopefully this gives you enough to work with.

Subject: Re: Estimation of cutoff points for Rwanda 2014-15 wealth index
Posted by [avmujica](#) on Mon, 08 May 2017 21:48:31 GMT

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Many thanks Trevor - will re-estimate using adjusted weights.
